

## CLAIMS

1. (Currently Amended) An automated software distribution method comprising:
  - receiving a request to access a software distribution system;
  - determining the request is from a registered user;
  - determining whether the registered user is authorized to perform an internal software development activity corresponding to one or more software projects in the software distribution system, where the internal software development activity includes publishing downloadable software to the software distribution system and determining whether the registered user is authorized to perform a commercial transaction to download software from the software distribution system;
  - providing the registered user access to ~~one or more software projects and tools that~~ facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where the ~~register user utilizes the tools to create or modify~~ downloadable software associated with the software projects;
  - ~~determining whether the registered user is entitled to perform a commercial transaction to download software from the software distribution system, where the register user is entitled to perform a commercial transaction with the software distribution system when the register user has provided financial consideration for the software to be downloaded from the software distribution system or established a service contract corresponding to the software to be downloaded;~~
  - ~~providing the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the register user downloads the software from the software distribution system when the registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system; and~~
  - populating the software distribution system with data associated with the downloadable software including at least product release information corresponding to the downloadable software or packaging information that maps the downloadable software to a displayable image corresponding to the downloadable software;
  - receiving requisite supervisory authorization to proceed with a publication of the downloadable software, where the requisite supervisory authorization indicates a manager of the

software distribution system, other than the registered user, approved the publication of the downloadable software; and

publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication

~~storing and tracking information associated with both internal software development activity performed by registered users and commercial transactions resulting in software being downloaded from the software distribution system by registered users.~~

2. (Canceled)

3. (Original) The automated software distribution method of Claim 1 wherein the request is received from an internal user via an internal LAN.

4. (Original) The automated software distribution method of Claim 1 wherein the request is received from an external user via the Internet.

5. (Previously Presented) The automated software distribution method of Claim 1 wherein said access to one or more software projects allows the registered user to access an internal storage of software products.

6. (Previously Presented) The automated software distribution method of Claim 1 wherein said access to one or more software projects allows the registered user to download software code, make changes and upload the modified code.

7. (Original) The automated software distribution method of Claim 1 wherein a scaleable software distribution system commerce transaction is engaged in an electronic commerce environment.

8. (Original) The automated software distribution method of Claim 1 wherein a software transaction process is utilized.

9. (Currently Amended) The An automated software distribution method of Claim 1,  
includes comprising:

receiving a request to access a software distribution system;

determining the request is from a registered user;

determining whether the registered user is authorized to perform an internal software development activity corresponding to software projects in the software distribution system and  
determining whether the registered user is authorized to perform a commercial transaction to  
download software from the software distribution system;

providing the registered user access to one or more software projects and tools that  
facilitate the development of the software projects when the registered user is authorized to  
perform internal software development activity, where the tools create or modify the software  
projects;

determining whether the registered user is entitled to perform a commercial transaction to  
download software from the software distribution system, where the registered user is entitled to  
perform a commercial transaction with the software distribution system when the registered user  
has provided financial consideration for the software to be downloaded from the software  
distribution system or established a service contract corresponding to the software to be  
downloaded;

providing the registered user access to software available for distribution that the  
registered user is entitled to download from the software distribution system, where the  
registered user downloads the software from the software distribution system when the registered  
user is both authorized and entitled to perform commercial transactions to download software  
from the software distribution system;

storing and tracking information associated with both internal software development  
activity performed by registered users and commercial transactions resulting in software being  
downloaded from the software distribution system by registered users;

confirming the registered user is authorized to publish downloadable software to the  
software distribution system;

populating the software distribution system with data corresponding to downloadable  
software with a software publishing tool available to registered users authorized to perform

internal software development activities, the data includes software code, product release information corresponding to the downloadable software, and packaging information that maps the software code to a displayable image corresponding to the downloadable software;

receiving requisite supervisory authorization to proceed with the publication of the downloadable software, where the requisite supervisory authorization includes an accuracy check of the downloadable software by a manager of the software distribution system other than the registered user that populated the software distribution system with data corresponding to downloadable software; and

publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication.

10. (Previously Presented) The internal software publishing process of Claim 9 wherein the request is received from a software engineer that has built a software image ready for commercial release.

11. (Previously Presented) The internal software publishing process of Claim 9 wherein the data population process includes a software distribution framework (SWDF) Information Model, a SWDF Product Model and a SWDF Packaging Model.

12. (Previously Presented) The internal software publishing process of Claim 9 wherein a software distribution framework (SWDF) packaging model is completed by pulling data from a database that includes features that map a software image and software product code.

13. (Previously Presented) The internal software publishing process of Claim 9 wherein software distribution framework (SWDF) authorization information is checked to make sure the requester has appropriate role responsibility to engage in image publishing.

14. (Currently Amended) The automated software distribution method of Claim 1, examining ~~the~~ commercial transaction rights of the registered user;

making a determination if the registered user has entitlement to proceed with a commercial transaction;

when the registered user is not entitled to proceed with the commercial transaction, prompting the registered user to provide financial consideration for the software to be downloaded or to establish a service contract for the software to be downloaded;

investigating to determine if the registered user successfully provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded; and

executing the ~~requested~~ commercial transaction when the registered user has provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded.

15. (Currently Amended) A commercial transaction process of Claim 14 wherein a software distribution framework (SWDF) system stores information on the commercial transaction rights of external customers.

16. (Currently Amended) A commercial transaction process of Claim 15 wherein a software distribution framework (SWDF) system stores information on the entitlements of external customers to engage in commercial transactions.

17. (Currently Amended) A commercial transaction process of Claim 15 wherein software distribution framework (SWDF) Entitlement Information includes information on whether the customer has a service contract or paid money for the requested software product and if the customer has entitlement to proceed the requested software product is downloaded.

18. (Previously Presented) A commercial transaction process of Claim 15 wherein the commercial transaction process is an electronic commerce process.

19. (Previously Presented) A commercial transaction process of Claim 15 wherein the software product comprises software image binary executables, readme information, installation instructions, product manuals, guide and software requirements, and software release note, and software licensing key.

20. (Currently Amended) An automated software distribution system comprising:  
means for determining whether a user is entitled to perform an internal software development activity according to instructions stored on a computer-readable medium, wherein said software development activity is accessible through said automated software distribution system;

~~means for determining whether said user is entitled to perform a commercial transaction to download software from the automated software distribution system according to instructions stored on the computer-readable medium, wherein said commercial activity is accessible through said automated software distribution system, where the user is entitled to perform a commercial transaction with the automated software distribution system when the user has provided financial consideration for the software to be downloaded from the automated software distribution system or established a service contract corresponding to the software to be downloaded;~~

means for providing the user access to ~~one or more software projects and tools that~~ facilitate the development of the software projects according to instructions stored on the computer-readable medium when the user is authorized to perform internal software development activity, where the ~~register user utilizes the tools to create or modify~~ downloadable software associated with the software projects;

~~means for providing the user access to software available for distribution that the user is entitled to download from the automated software distribution system according to instructions stored on the computer-readable medium, where the user downloads the software from the automated software distribution system when the registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system;~~  
and

means for populating the software distribution system with data associated with the downloadable software including at least product release information corresponding to the

downloadable software or packaging information that maps the downloadable software to a displayable image corresponding to the downloadable software;

means for receiving requisite supervisory authorization to proceed with a publication of the downloadable software, where the requisite supervisory authorization indicates a manager of the software distribution system, other than the registered user, approved the publication of the downloadable software;

means for publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication

~~means for storing and tracking said information associated with both internal software development activity performed by users and commercial transactions resulting in software being downloaded from the software distribution system by users.~~

21. (Previously Presented) An automated software distribution system of Claim 20 wherein said information associated with an automated software distribution method is organized in accordance with software distribution framework (SWDF) modules that manage the software distribution information and activities in accordance with SWDF models.

22. (Previously Presented) An automated software distribution system of Claim 21 wherein said information associated with an automated software distribution method is organized in accordance with a software distribution framework (SWDF) database, wherein SWDF database schema components are configured in accordance with four categories comprising regular database tables, composite link database tables, associating link database tables and runtime information query components.

23. (Previously Presented) An automated software distribution system of Claim 21 wherein said information associated with an automated software distribution method is tracked and manipulated by means for indicating classes, attributes and operations.

24. (Previously Presented) An automated software distribution system of Claim 21 further comprising a means for managing different areas of framework information including

user information, authorization information, software information, configuration information, commerce information, publication information, and distribution information.

25. (Previously Presented) An automated software distribution system of Claim 21 wherein a link database is table is a persistent storage for the relationship of two objects.

26. (Currently Amended) An automated software distribution apparatus comprising:  
a bus for communicating information associated with an automated software distribution method;

an input mechanism for receiving requests from a user for access to said information, said user having associated transaction rights;

a processor to

determine whether the registered user is authorized to perform an internal software development activity corresponding to software projects in the software distribution system and determining whether the registered user is authorized to perform a commercial transaction to download software from the software distribution system;

provide the registered user access to one or more software projects and tools that facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where ~~the register user~~ utilizes the tools to modify the software projects;

determine whether the registered user is entitled to perform a commercial transaction to download software from the software distribution system, where the ~~register~~ registered user is entitled to perform a commercial transaction with the software distribution system when the ~~register~~ registered user has provided financial consideration for the software to be downloaded from the software distribution system or established a service contract corresponding to the software to be downloaded;

provide the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the ~~register~~ registered user downloads the software from the software distribution system when the registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system; and



a memory for storing and tracking said information associated with an automated software distribution method, wherein said automated software distribution method utilizes a scalable software distribution framework and object model in which objects are linked together by unique object identifiers;

wherein the processor is adapted to  
confirm the registered user is authorized to publish downloadable software to the  
software distribution system;

populate the software distribution system with data corresponding to downloadable  
software with a software publishing tool available to registered users authorized to perform  
internal software development activities, the data includes software code, product release  
information corresponding to the downloadable software, and packaging information that maps  
the software code to a displayable image corresponding to the downloadable software;

receive requisite supervisory authorization to proceed with the publication of the  
downloadable software, where the requisite supervisory authorization includes an accuracy  
check of the downloadable software by a manager of the software distribution system other than  
the registered user that populated the software distribution system with data corresponding to  
downloadable software; and

publish the downloadable software to the software distribution system according to the  
data populated in the software distribution system, the publishing performed responsive to  
receiving the requisite supervisory authorization to proceed with the publication.

27. (Canceled)

28. (Currently Amended) The automated software distribution apparatus of Claim 26 ~~27~~  
wherein the processor is adapted to

examine the commercial transaction rights of the registered user;  
make a determination if the registered user has entitlement to proceed with a  
commercial transaction;

when the registered user is not entitled to proceed with the commercial transaction,  
prompt the registered user to provide financial consideration for the software to be downloaded  
or to establish a service contract for the software to be downloaded;

investigate to determine if a the registered user successfully provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded; and

execute the requested commercial transaction when the registered user has provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded.

29. (Currently Amended) The automated software distribution apparatus of Claim 26 ~~27~~ wherein an XML-based software distribution framework is utilized to enable automatic distribution of software over the Internet and World Wide Web (WWW) while coordinating, correlating and collecting information that assists software distribution management and maintenance activities.

30. (Currently Amended) The automated software distribution apparatus of Claim 26 ~~27~~ wherein software images are published based on software rights associated with a business rule/responsibility model and software products are distributed to customers based on commerce model.

31. (Currently Amended) A computer usable medium having a computer readable program code embodied therein for causing a computer system to perform an automated software distribution method, said automated software distribution method comprising:

receiving a request to access a software distribution system;

determining the request is from a registered user;

determining whether the registered user has authorization to perform an internal software development activity corresponding to software projects in the software distribution system and determining whether the registered user is authorized to perform a commercial transaction to download software from the software distribution system;

providing the registered user access to one or more software projects and tools that facilitate the development of the software projects when the registered user is authorized to perform internal software development activity, where ~~the registered user utilizes the tools to create or modify the software projects;~~

determining whether the registered user is entitled to perform a commercial transaction to download software from the software distribution system, where the ~~register~~ registered user is entitled to perform a commercial transaction with the software distribution system when the ~~register~~ registered user has provided financial consideration for the software to be downloaded from the software distribution system or established a service contract corresponding to the software to be downloaded;

providing the registered user access to software available for distribution that the registered user is entitled to download from the software distribution system, where the ~~register~~ registered user downloads the software from the software distribution system when the registered user is both authorized and entitled to perform commercial transactions to download software from the software distribution system; and

utilizing a scalable software distribution framework and object model ~~in which~~ in which objects are linked together by unique object identifiers;

confirming the registered user is authorized to publish downloadable software to the software distribution system;

populating the software distribution system with data corresponding to downloadable software with a software publishing tool available to registered users authorized to perform internal software development activities, the data includes software code, product release information corresponding to the downloadable software, and packaging information that maps the software code to a displayable image corresponding to the downloadable software;

receiving requisite supervisory authorization to proceed with the publication of the downloadable software, where the requisite supervisory authorization includes an accuracy check of the downloadable software by a manager of the software distribution system other than the registered user that populated the software distribution system with data corresponding to downloadable software; and

publishing the downloadable software to the software distribution system according to the data populated in the software distribution system, the publishing performed responsive to receiving the requisite supervisory authorization to proceed with the publication.

32. (Canceled)

33. (Currently Amended) The automated software distribution method of Claim 31 ~~32~~ includes

- examining the commercial transaction rights of the registered user;

- making a determination if the registered user has entitlement to proceed with a commercial transaction;

- when the registered user is not entitled to proceed with the commercial transaction, prompting the registered user to provide financial consideration for the software to be downloaded or to establish a service contract for the software to be downloaded;

- investigating to determine if a the registered user successfully provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded; and

- executing the requested commercial transaction when the registered user has provided financial consideration for the software to be downloaded or to established a service contract for the software to be downloaded.

34. (Previously Presented) The automated software distribution method of Claim 33 wherein an internal user is able to download software code, make changes and upload the modified code and both internal and external users are able to engage in a scalable software distribution system commerce transaction.